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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHELEHEDA, JAMES R

ART UNIT PAPER NUMBER

2623

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/760,242

Applicant(s)

DAVIDSON, ROBERT J.

Examiner

James Sheleheda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 5, 8, 9, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung (6,628,963) (of record) in view of Gibson et al. (Gibson) (5,557,596) (of record).

As to claim 1, while Chung discloses a method of portably handling a movie (column 1, lines 5-12) comprising:

storing a digitally formatted movie into a portable digital movie storage module (column 1, lines 37-40, column 2, line 56-column 3, line 20);

connecting the portable digital storage module to a portable digital movie playback device (column 2, lines 56-62 and column 3, lines 16-20);

recalling selectively the digitally formatted movie from the portable storage module into the portable digitally formatted movie playback device (Fig. 2; column 2, line 56-column 3, line 20); and

displaying the digital movie on the portable digital movie playback device (column 3, lines 16-20), he fails to specifically disclose wherein said storage module includes an atomic resolution storage memory component.

In an analogous art, Gibson discloses the use of an atomic resolution storage device (Figs. 1A-C; column 1, line 63-column 2, line 33) as opposed to conventional storage technologies (column 1, lines 14-21) for the typical benefit of providing ultra-high density storage with fast access times and high data rates (column 1, lines 52-62).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung's system to include an atomic resolution storage memory component, as taught by Gibson, for the typical benefit of taking advantage of the benefits provided by an atomic resolution storage device, such as fast access times and high data rates combined with ultra-high density storage.

As to claim 4, Chung and Gibson disclose repeating the storing step to capture additional digitally formatted movies into the memory component of the storage module (downloading and storing a plurality of movie files; see Chung at column 1, lines 5-12, lines 37-40 and column 2, lines 55-62).

As to claim 5, Chung and Gibson disclose wherein recalling selectively the digitally formatted movie further comprises the playback device including a personal movie player (portable multimedia player; see Chung at Figs. 1 and 2; column 1, lines 20-30).

As to claim 8, Chung and Gibson disclose performing storing the digitally formatted movie and recalling selectively the digitally formatted movie in a broadband frequency format (MPEG format; see Chung at column 2, line 35 - column 3, line 11).

As to claim 9, while Chung discloses a portable movie storage module (column 2, lines 55-62 and column 1, lines 37-40) comprising:

a portable storage device (26) removably connectable to a portable digital playback device (Fig. 3; column 2, lines 56-62) capable of displaying a digitally formatted movie (column 1, lines 37-40 and column 2, line 66-column 3, lines 20) and a memory component capable of storing at least one movie (column 1, lines 37-40); and

a communication interface for communicating to and from the memory component of the storage module (inherently present to allow the memory to interface and communicate with the player; see Chung at Fig. 1; column 2, lines 56-62) and for providing the digitally formatted movie from the storage module to the portable digital playback device (column 2, line 56-column 3, line 20), he fails to specifically disclose wherein said storage module is an ultra-high capacity storage device including an atomic resolution storage memory component.

In an analogous art, Gibson discloses the use of an atomic resolution storage device (Figs. 1A-C; column 1, line 63-column 2, line 33) as opposed to conventional storage technologies (column 1, lines 14-21) for the typical benefit of providing ultra-high density storage with fast access times and high data rates (column 1, lines 52-62).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung's system to include an ultra-high capacity storage device including an atomic resolution storage memory component, as taught by Gibson, for the typical benefit of taking advantage of the benefits provided by an atomic resolution storage device, such as fast access times and high data rates combined with ultra-high density storage.

As to claim 11, Chung and Gibson disclose wherein the atomic resolution storage device comprises a field emitter fabricated by semiconductor micro-fabrication techniques capable of generating an electron beam current (see Gibson at column 2, line 65 - column 3, line 29); and

a storage medium in proximity to the field emitter and having a storage area in one of a plurality of states to represent the information stored in the storage area (see Gibson at column 3, lines 1-5).

As to claim 12, Chung and Gibson disclose an effect being generated when the electron beam current bombards the storage area, wherein the magnitude is dependent on the state of said storage, and wherein storage data is read by measuring the magnitude of the effect (see Gibson at column 5, line 64 - column 6, line 10).

As to claim 13, Chung and Gibson disclose the atomic resolution storage module further comprising a plurality of storage areas on the storage medium, each storage

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area in one of a plurality of states to represent information stored in the storage area (see Gibson at column 5, line 64 – column 6, line 10), and a micro fabricated mover in the storage device for positioning various areas to be bombarded by the electron beam current (see Gibson at column 6, lines 2-10).

As to claim 14, Chung and Gibson disclose the atomic resolution storage module further comprising a plurality of said field emitters (see Gibson at column 2, line 65 - column 3, line 5), with each emitter fabricated by semiconductor micro fabrication techniques capable of generating an electron beam current (see Gibson at column 3, lines 5-20), with each emitter space apart, and with each emitter being responsible for a number of storage areas such that said emitters can function in parallel to increase the data rate of the storage device (see Gibson at column 3, line 57 - column 4, line 20).

As to claim 15, Chung and Gibson disclose a housing which encloses the portable digital ultra-high capacity storage device and the communication interface (inherently present to house and protect a *removable* memory device; see Chung at column 2, lines 56-62).

3. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung and Gibson as applied to claim 1 above, and further in view of Nomura et al. (Nomura) (US 2002/0078176 A1).

As to claim 2, while Chung and Gibson disclose transferring a copy of the movie into the memory component of the portable storage module (downloading the movie file; see Chung at column 1, lines 6-12, lines 37-40 and column 2, lines 56-62), they fail to specifically disclose transferring a copy of the movie from a movie purchase center.

In an analogous art, Nomura discloses purchase system permitting purchasable access to digitally formatted movies (Fig. 1; paragraphs 8 and 34-36) wherein a remote movie purchase center (paragraphs 24-26) will store a database of digitally formatted movies (paragraphs 24-26 and) which can be downloaded and transferred into the memory component of a portable storage module (recorded onto transferable memory for a separate video playing device; paragraphs 14, 33 and 35) for the typical benefits of providing an efficient distribution system wherein users may rent and purchase desired content (paragraphs 7 and 8).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung and Gibson's system to include transferring a copy of the movie from a movie purchase center, as taught by Nomura, for the typical benefits of providing an efficient distribution system wherein users may rent and purchase desired content.

As to claim 3, Chung, Gibson and Nomura disclose wherein downloading the movie from a remotely located centralized movie database (see Nomura at paragraphs 23-26 and 33-36).



4. Claims 6, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung and Gibson as applied to claims 1 and 9 above, and further in view of Yamagata et al. (Yamagata) (4,908,793) (of record).

As to claim 6, while Chung and Gibson disclose wherein storing the digitally formatted movie further comprises providing the storage module with a communication interface (inherently present to allow the memory to interface and communicate with the player; see Chung at Fig. 1; column 2, lines 56-62), however they fail to specifically disclose wherein the storage module has a power supply.

In an analogous art, Yamagata discloses a storage device (100) containing a communications interface (6) and being coupled to a power supply (power supply circuit 150 and battery 130) for the typical benefit of generating power necessary to allow the memory to record and reproduce information (column 2, lines 39-40).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Chung and Gibson's system to include the storage module having a power supply, as taught by Yamagata, for the typical benefits of ensuring that an external memory device can generate power to record and reproduce information in the memory storage device.

As to claim 7, Chung, Gibson and Yamagata (as applied above) fail to specifically disclose wherein the memory component further comprises controller logic for operating the storage device and communicating between the memory component and the communications interface, as recited in the claim.

Yamagata further discloses wherein the memory component (100) further comprises controller logic (disk control circuit 9) for operating the storage device and communicating between the memory component and the communications interface (column 2, lines 64-65, column 3, lines 22-26, and column 4, lines 1-4), for the typical benefit of having the ability to control the read and write operations of the memory device (column 2, lines 64-65, and column 4, lines 1-4).

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify Chung, Gibson and Yamagata's system to further include wherein the memory component comprises controller logic for operating the storage device and communicating between the memory component and the communications interface, as further taught by Yamagata, for the typical benefit of having the ability to control the read and write operations of the memory device in a communications storage medium.

As to claim 10, while Chung and Gibson disclose an atomic resolution storage device, they fail to specifically disclose wherein the memory component further comprises controller logic for operating the storage device and communicating between the memory component and the communications interface, as recited in the claim.

Yamagata discloses wherein the memory component (100) further comprises controller logic (disk control circuit 9) for operating the storage device and communicating between the memory component and the communications interface (column 2, lines 64-65, column 3, lines 22-26, and column 4, lines 1-4), for the typical

benefit of having the ability to control the read and write operations of the memory device (column 2, lines 64-65, and column 4, lines 1-4).

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify Chung and Gibson's system to further include wherein the memory component comprises controller logic for operating the storage device and communicating between the memory component and the communications interface, as taught by Yamagata, for the typical benefit of having the ability to control the read and write operations of the memory device in a communications storage medium.

5. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung in view of Gibson and Nomura.

As to claim 16, Chung discloses a portable digital movie handling system (column 1, lines 5-12), comprising:

a portable digital movie storage module (26) comprising:

a memory device for storing at least one digitally formatted movie (column 1, lines 37-40, column 2, line 56-column 3, line 20); and

a communication interface for communicating to and from the storage device (inherently present to allow the memory to interface and communicate with the player; see Chung at Fig. 1; column 2, lines 56-62) and for providing at least one digitally formatted movie from the storage module (column 2, line 56-column 3, line 20); and

a portable digital movie playback device removably connected to the storage memory device (Fig. 3; column 2, lines 56-62 and column 3, lines 16-20) for receiving a

digitally formatted movie (column 2, lines 56-62 and column 3, lines 16-20) and for displaying the digitally formatted movie from the storage memory device of the portable digital movie storage module (column 1, lines 36-40, column 2, lines 56-62 and column 3, lines 16-20).

While Chung discloses a portable removable memory device (column 2, lines 56-62) and downloading a movie (column 1, lines 5-12 and lines 36-40), he fails to specifically disclose wherein the storage device is an atomic resolution storage device and a purchase system permitting purchasable access to digitally formatted movies, including:

a centralized movie database storing a collection of digitally formatted movies for downloading to multiple points-of-purchase; and

a point of purchase center for selectively transferring a copy of a selected digitally formatted movie from the centralized database to the memory device of the movie storage module.

In an analogous art, Gibson discloses the use of an atomic resolution storage device (Figs. 1A-C; column 1, line 63-column 2, line 33) as opposed to conventional storage technologies (column 1, lines 14-21) for the typical benefit of providing ultra-high density storage with fast access times and high data rates (column 1, lines 52-62).

Additionally, in an analogous art, Nomura discloses purchase system permitting purchasable access to digitally formatted movies (Fig. 1; paragraphs 8 and 34-36) wherein a centralized database (paragraphs 24-26) which stores a collection of digitally formatted movies (paragraphs 24-26 and) which can be downloaded to multiple points-

of-purchase (different user sites; paragraphs 29 and 33-36) to selectively transfer a copy of the selected digitally formatted movie from the centralized database to a memory device of the portable movie storage module (recorded onto transferable memory for a separate video playing device; paragraphs 14, 33 and 35) for the typical benefits of providing an efficient distribution system wherein users may rent and purchase desired content (paragraphs 7 and 8).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung's system to include an atomic resolution storage memory component, as taught by Gibson, for the typical benefit of taking advantage of the benefits provided by an atomic resolution storage device, such as fast access times and high data rates combined with ultra-high density storage.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung and Gibson's system to include a purchase system permitting purchasable access to digitally formatted movies, including:

- a centralized movie database storing a collection of digitally formatted movies for downloading to multiple points-of-purchase; and

- a point of purchase center for selectively transferring a copy of a selected digitally formatted movie from the centralized database to the memory device of the movie storage module, as taught by Nomura, for the typical benefits of providing an efficient distribution system wherein users may rent and purchase desired content.

As to claim 17, Chung, Gibson and Nomura disclose wherein the playback device includes a personal portable playback device (portable multimedia player; see Chung at Figs. 1 and 2; column 1, lines 20-30).

As to claim 18, Chung, Gibson and Nomura disclose wherein the centralized movie database comprises a cable TV network (see Nomura at paragraph 11) and the point of purchase center comprises a cable TV receiver (see Nomura at paragraphs 11, 14 and 33-36).

6. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung and Gibson as applied to claim 1 above, and further in view of Russo (5,619,247) (of record).

As to claim 19, while Chung and Gibson disclose storing a movie in the portable movie storage module, they fail to specifically disclose

storing instructions into the portable movie storage module to limit viewing the movie to a finite number of viewings; and

deleting the movie from the portable movie storage module once the movie has been viewed the finite number of viewings.

In an analogous art, Russo discloses a video system (Fig. 1; column 3, lines 40-64) wherein received programs are stored in a storage unit (14; column 4, lines 10-29) and wherein a viewed movie is deleted from storage (automatically erasing the movie after it has been viewed and enjoyed; column 11, lines 11-16) after the user has

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finished viewing the movie (column 11, lines 5-15) for the typical benefit of saving space on the storage medium (column 11, lines 14-16).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung and Gibson's system to include storing instructions into the portable movie storage module to limit viewing the movie to a finite number of viewings; and deleting the movie from the portable movie storage module once the movie has been viewed the finite number of viewings, as taught by Russo, for the typical benefit of saving space on the storage medium.

As to claim 20, while Chung and Gibson disclose storing a movie in the portable movie storage module, they fail to specifically disclose

storing instructions into the portable movie storage module to limit viewing the movie to a finite period of time; and

deleting the movie from the portable movie storage module once the finite period of time has expired.

In an analogous art, Russo discloses a video system (Fig. 1; column 3, lines 40-64) wherein received programs are stored in a storage unit (14; column 4, lines 10-29) and wherein a viewed movie is deleted from storage (automatically erasing the movie after it has been viewed and enjoyed; column 11, lines 11-16) after a finite period of time for viewing the movie has expired (after a typical movie rental period; column 5, lines 34-42) for the typical benefit of saving space on the storage medium (column 11, lines 14-16).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Chung and Gibson's system to include storing instructions into the portable movie storage module to limit viewing the movie to a finite period of time; and deleting the movie from the portable movie storage module once the finite period of time has expired, as taught by Russo, for the typical benefit of saving space on the storage medium.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

This action is made final as a result of applicant's claim amendments, filed 08/26/05, in response to the previous non-final action.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda  
Patent Examiner  
Art Unit 2617

JS



**CHRIS KELLEY**  
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